



According standards: C 90131 - France Télécom: C 12.21 H - Edition 2 - 06/98

Cable type	Standard:	711CRC8
Size: A3	Aerial:	F 711CRC8
	Units	Nominal

### Construction

<b>INNER CONDUCTOR</b>			
Material and construction	-	copper wire	
Diameter	mm	2.8	
<b>DIELECTRIC</b>			
Material	-	gas-injected cellular PE	
Diameter	mm	11.6	
<b>OUTER CONDUCTOR</b>			
Material and construction	-	smooth copper tape	
<b>OUTER SHEATH</b>			
Material	-	black HD-PE	
Thickness	mm	1.8	> 1.43
Overall diameter	mm	15.8	< 16

### Cable with messenger

<b>MESSENGER</b>			
Material	-	galvanized steel	
Construction	.. X mm	7 x 1	
Height of web	mm	2.5	
Wide of web	mm	1.8	
Diameter over messenger	mm	6	

### Mechanical characteristics

Minimum bending radius	1 x	cm	10
	10 x	cm	18
Maximum pulling strength (without messenger)		daN	100
Weight		kg/km	211

### Cable with messenger

Minimum breaking strength of messenger	daN	7160
Weight	kg/km	285

### Electrical characteristics

Characteristic impedance	Ω	75	+/- 2
Capacity	pF/m	50	
Relative propagation velocity (velocity ratio)	%	88	
DC-resistance of inner conductor at 20°C	Ω/km	2.8	< 2.9
DC-resistance of outer conductor at 20°C	Ω/km	2.8	< 2.9
Current rating (50 - 60) Hz	A	16	
Dielectric voltage strength	kV	3	
Longitudinal attenuation at 20°C	$\alpha(f_{[MHz]}) = a \cdot \sqrt{f_{[MHz]}} + b \cdot f_{[MHz]}$		
	a =	-	0.21
	b =	-	0.00084
	5 MHz	dB/100m	0.5 < 0.5
	10 MHz	dB/100m	0.7 < 0.7
	30 MHz	dB/100m	1.2 < 1.2
	50 MHz	dB/100m	1.5 < 1.6
	100 MHz	dB/100m	2.2 < 2.3
	200 MHz	dB/100m	3.1 < 3.3
	300 MHz	dB/100m	3.9 < 4.1
	400 MHz	dB/100m	4.5 < 4.8
	470 MHz	dB/100m	5.0 < 5.2
	600 MHz	dB/100m	5.7 < 5.9
	800 MHz	dB/100m	6.6 < 6.9
	860 MHz	dB/100m	6.9 < 7.2
	1000 MHz	dB/100m	7.5 < 7.9
Return loss (3 peak values up to 4 dB lower are permissible)			
	30 - 310 MHz	dB (VSWR)	23 > 19
	310 - 460 MHz	dB (VSWR)	21 > 17
	460 - 585 MHz	dB (VSWR)	19 > 15
	585 - 862 MHz	dB (VSWR)	18 > 14

